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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,738	08/04/2003	Graham John Myatt	9151R	5595
27752	7590	03/23/2004	EXAMINER	
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224			WHITE, EVERETT NMN	
		ART UNIT		PAPER NUMBER
		1623		
DATE MAILED: 03/23/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/633,738	MYATT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	EVERETT WHITE	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-32 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-32 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date November 17, 2003.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 2 is objected to because of the following informalities: Claim 2 improperly listed the term "phosphoric acid" twice at line 8 of Claim 2. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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3. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al (US Patent No. 6,045,847) in view of Marlett et al (US Patent No. 6,287,609) or Colliopoulos (US Patent No. 5,009,916).

Applicants claim a composition comprising: (a) a polysaccharide component comprising xylose and arabinose, wherein the ratio of xylose to arabinose is at least about 3:1, by weight; and (b) a dispersing component selected from the group consisting of binders, suspending agents, edible acids, and mixtures thereof. Additional limitations in the dependent claims include the binder selected from the group consisting of polyols and starches; the suspending agent selected as a gum; the edible acid is selected from the group consisting of lactic acid, citric acid, malic acid, fumaric acid, adipic acid, phosphoric acid, gluconic acid, tartaric acid, ascorbic acid, acetic acid, and succinic acid; the composition comprising agglomerates, wherein the agglomerates comprise at least a portion of the polysaccharide component and binder; the agglomerate a specific amount of polysaccharide component; the composition comprising a specific amount of polysaccharide component; the polysaccharide component further comprises a component selected from the group consisting of galactose, glucose, uronic acid and mixtures thereof; the binder selected as maltodextrin; the composition further comprising a component selected from the group consisting of lubricating agents, emulsifiers, surfactants, cellulosic materials, and mixtures thereof; the composition comprising starch and gum selected as tara gum and guar gum; and the composition further comprising an aqueous liquid.

The Nakamura et al patent shows that compositions that comprise xylose and arabinose are well known in the art. Nakamura et al discloses a water-soluble hemicellulose, which is a polysaccharide containing xylose and arabinose along with other constituent saccharides that include galactose, fucose, rhamnose and galacturonic acid. Nakamura et al discloses that the water-soluble hemicellulose can be used as a dietary fiber additive for foods, which includes rice. Nakamura et al discloses that the water-soluble hemicellulose may be used alone or in an emulsified state with fat or oil to achieve the function of producing a shorter soaking time and allowing a greater amount of water to permeate the rice, but also sets forth that other quality enhancers or

additives may be combined therewith as deemed suitable. Examples of quality enhancers and additives listed in the Nakamura et al patent include guar gum, process starch and other starches. Nakamura et al also teaches that the water-soluble hemicellulose as part of a soaking time-shortening agent for grain preparation may be distributed and sold in emulsified or suspended form with a fat or oil, or in solution form in water, saline or a solution of an organic acid such as acetic acid (see column 4, 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs). The water-soluble hemicellulose composition of the Nakamura et al patent comprising the named constituent saccharides and quality enhancers or additives such as guar gum, starch and acetic acid embraces the instantly claimed composition comprising the named polysaccharide components and binders, suspending agents and edible acids thereof. The composition of the instant claims differs from the composition of the Nakamura et al patent by claiming the xylose and arabinose of the polysaccharide component as having a ratio at least about 3:1, by weight.

The Marlett et al patent discloses psyllium seed husks that can be used as a dietary substance to promote laxation and also as a hypocholesterolemic agent (see abstract). Marlett et al teaches the preparation of fractions obtained from psyllium seed husks that comprised mostly of xylose and arabinose. See column 4, lines 48-53 of the Marlett et al patent wherein a fraction B obtained from psyllium seed husks has 50% xylose and arabinose by weight and in a preferred embodiment at least 85% xylose and arabinose by weight. Also see column 5, lines 3-6 wherein Marlett et al discloses the ratio of weights of xylose to arabinose of Fraction B as being between 2.5 and 4.5, and between 3.0 and 4.0 in a preferred embodiment, which covers the xylose to arabinose ratio set forth in the instant claims. Furthermore, see Table 1 of the Marlett et al patent wherein other polysaccharide particles are present in compositions of psyllium seed husk fractions that include galactose, glucose and uronic acids, as set forth in the instant claims.

The composition of the instant claims also differs from the composition of the Nakamura et al patent by claiming that the composition comprises agglomerates comprising a polysaccharide component comprising xylose and arabinose. The

Colliopoulos patent shows that a psyllium high fiber drink mix made by agglomerating a base comprising at least 5 to 99 weight percent psyllium mucilloid is well known in the art (see column 2, lines 33-39). See column 3, 5<sup>th</sup> full paragraph of the Colliopoulos patent, wherein the high fiber drink composition may be manufactured by coating the dry blended ingredients with a selection of materials that include gums and cellulose derivatives, hydrolyzed starch oligosaccharide, mono or disacchaide, a polyglucose or a polymaltose to form an agglomerate by methods well known to one skilled in the art wherein said agglomerate product may be from 0 to 20 weight percent of the water soluble materials set forth in the Colliopoulos patent. Colliopoulos uses the psyllium high fiber drink mix as a dietary aid or to control constipation. The Marlett et al patent, discussed above, establishes that psyllium comprises xylose and arabinose in the claimed ratio of 3:1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the polysaccharide comprising xylose and arabinose used in the dietary composition of the Nakamura et al patent with a psyllium seed husk fraction comprising xylose and arabinose at a specific ratio and to agglomerate these ingredients in view of the recognition in the art, as evidenced by the Marlett et al and Colliopoulos patents, that use of a dietary composition comprising psyllium as a component is effective as a laxative and hypcholesterolemic agent.

One of ordinary skill in this art would be motivated to combine the teachings of the Nakamura et al, Marlett et al and Colliopoulos patents in a rejection of the claims under 35 U.S.C. 103 since all the patents set forth dietary compositions that comprise xylose and arabinose.

4. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al and Marlett et al as applied to Claims 1-27 above, and further in view of Barbera (US Patent No. 5,425,945).

Applicants claim a composition comprising: (a) a polysaccharide component comprising xylose and arabinose, wherein the ratio of xylose to arabinose is at least about 3:1, by weight; and (b) a dispersing component selected from the group

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consisting of binders, suspending agents, edible acids, and mixtures thereof, wherein the binder is selected as maltodextrin.

The information set forth for the Nakamura et al and Marlett et al patents in the above rejection is incorporated into the current rejection. The instant claims differ from the Nakamura et al and Marlett et al patents by claiming a composition comprising maltodextrin. The Barbera patent discloses agglomerated psyllium husk containing edible acid, wherein the edible acids include citric acid, ascorbic acid, malic acid, succinic acid, tartaric acid and phosphoric acid (see column 4, 4<sup>th</sup> paragraph). The Barbera patent also set forth the use of maltodextrin as the agglomerating material (see column 6, line 13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the polysaccharide composition comprising xylose and arabinose used in the dietary composition establish by the combination of the Nakamura et al patent and the Marlett et al patent with a psyllium-containing composition in view of the recognition in the art, as evidenced by the Barbera patent, that the psyllium material as part of the composition improves the mixability and dispersibility of the composition in liquids.

One of ordinary skill in this art would be motivated to combine the teachings of the Nakamura et al and Marlett et al patents with the teachings of the Barbera patent in a rejection of the claims under 35 U.S.C. 103 since all the patents set forth dietary compositions that comprise xylose and arabinose components.

5. Claims 1 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colliopoulos (US Patent No. 5,009,916) in view of Marlett et al (US Patent No. 6,287,609) or.

Applicants claim a composition comprising: (a) a polysaccharide component comprising xylose and arabinose, wherein the ratio of xylose to arabinose is at least about 3:1, by weight; and (b) a dispersing component selected from the group consisting of binders, suspending agents, edible acids, and mixtures thereof. Additional limitations in the depending claims include a method of preparing a product comprising

admixing said composition with an aqueous liquid; the method wherein the aqueous liquid comprises water; the method wherein the aqueous liquid comprises fruit or vegetable juice; method of providing a benefit selected from the group consisting of normalizing bowel function, inducing laxation, providing dietary fiber, reducing serum cholesterol levels, and combinations thereof, comprising orally administering a product comprising said composition to a mammal in need of the benefit.

The Colliopoulos patent shows that a psyllium high fiber drink mix made by agglomerating a base comprising at least 5 to 99 weight percent psyllium mucilloid is well known in the art (see column 2, lines 33-39). See column 3, 5<sup>th</sup> full paragraph of the Colliopoulos patent, wherein the high fiber drink composition may be manufactured by dry blending the ingredients or coating a dry blended ingredients with a selection of materials that include gums and cellulose derivatives, hydrolyzed starch oligosaccharide, mono or disaccharide, a polyglucose or a polymaltose to form an agglomerate produced and mixing the agglomerate product with water to form the psyllium high fiber drink mix. See column 1, lines 30 and 31 wherein the Colliopoulos patent disclose the use of the psyllium high fiber drink mix as a dietary aid or to control constipation. The examples set forth in the Colliopoulos patent further lists ingredients that are found in fruits and vegetables. The instant claims differ from the Colliopoulos patent by claiming the ratio of xylose to arabinose to be at least about 3:1.

The Marlett et al patent discloses psyllium seed husks that can be used as a dietary substance to promote laxation and also as a hypocholesterolemic agent (see abstract). Marlett et al teaches the preparation of fractions obtained from psyllium seed husks that comprised mostly of xylose and arabinose. See column 4, lines 48-53 of the Marlett et al patent wherein a fraction B obtained from psyllium seed husks has 50% xylose and arabinose by weight and in a preferred embodiment at least 85% xylose and arabinose by weight. Also see column 5, lines 3-6 wherein Marlett et al discloses the ratio of weights of xylose to arabinose in Fraction B as being between 2.5 and 4.5, and between 3.0 and 4.0 in a preferred embodiment, which covers the xylose to arabinose ratio set forth in the instant claims.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the psyllium mucilloid used to prepare the psyllium high fiber drink mix of the Colliopoulos patent with the psyllium material having a xylose to arabinose ratio of at least 3:1 in view of the recognition in the art, as evidenced by the Marlett et al patent, that use of a dietary composition comprising psyllium as a component is effective as a laxative and hypcholesterolemic agent.

One of ordinary skill in this art would be motivated to combine the teachings of the Marlett et al and Colliopoulos patents in a rejection of the claims under 35 U.S.C. 103 since both patents set forth dietary compositions that comprises a psyllium component.

### ***Summary***

6. All the Claims are rejected.

#### ***Examiner's Telephone Number, Fax Number, and Other Information***

7. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit our website at [www.uspto.gov](http://www.uspto.gov) and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (571) 272-0660. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (571) 272-0661. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

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